

AMENDMENT TO THE CLAIMS

Please amend the presently pending claims as follows:

1. (Currently Amended) Method for management of communication in a communication network comprising at least one transmission device and at least one terminal adapted to receiving data from ~~the~~ said at least one transmission device wherein the method comprises:

- setting up a communication between one of ~~the~~ said transmission devices called the transmission device, and one of ~~the~~ said terminals called the receiving terminal, using a first communication mode based on a single carrier modulation; and
- changeover to a second communication mode using a multiple carrier modulation, a communication channel using ~~the~~ said multiple carrier modulation being solely assigned to a downlink for the communication between ~~the~~ said transmission device and ~~the~~ said receiving terminal;

the first and second communication modes being implemented successively and alternately,

and wherein the changeover to the second communication mode is implemented according to at least one signaling information transmitted by the transmission device to the receiving terminal through the first communication mode.

2. (Currently Amended) Method according to claim 1, wherein ~~the~~ said multiple carrier modulation is an OFDM type modulation with a guard interval.

3. (Currently Amended) Method according to claim 1, wherein ~~the~~ said multiple carrier modulation is an IOTA type modulation.

4. (Currently Amended) Method according to claim 1, wherein ~~the~~ said first communication mode is adapted to carrying out operations for management of setting up, maintaining, and

closing of a communication between the transmission device and the receiving terminal.

5. (Currently Amended) Method according to claim 1, wherein ~~the~~ said communication network is a mobile communication network (UMTS).

6. (Currently Amended) Method according to claim 5, wherein ~~the~~ said first communication mode uses at least one common channel (FACH) that is intended to all the terminals managed by ~~the~~ said transmission device.

7. (Currently Amended) Method according to claim 6, wherein ~~the~~ said first communication mode uses at least one access channel type (FACH) downlink common channel, enabling ~~the~~ said changeover to ~~the~~ said second communication mode.

8. (Currently Amended) Method according to claim 1, wherein ~~the~~ said first communication mode uses at least one uplink common channel (RACH) to acknowledge data transmitted correctly to ~~the~~ said receiving terminal when the second communication mode is being used.

9. (Currently Amended) Method according to claim 1, wherein ~~the~~ said second communication mode is adapted to transmitting data at high speed between ~~the~~ said transmission device and ~~the~~ said receiving terminal.

10. (Currently Amended) Method according to claim 9, wherein ~~the~~ said second communication mode is adapted to transmitting Internet type data to ~~the~~ said receiving terminal.

11. (Currently Amended) Method according to claim 1, wherein ~~the~~ said transmission device is a base station in a cellular communication network.

12. (Currently Amended) Communication network signal comprising at least one transmission device and at least one terminal adapted to receiving data from ~~the~~ said at least transmission device, wherein the communication network further comprises first and second communication modes:

- the first communication mode based on a single carrier modulation, being used when setting up a communication between at least one of ~~the~~ said transmission devices, called the transmission device, and one of ~~the~~ said terminals called the receiving terminal; and
- the second communication mode using a multiple carrier modulation being used on a communication channel using ~~the~~ said multiple carrier modulation, solely assigned to a downlink for the communication between ~~the~~ said transmission device and ~~the~~ said receiving terminal,

the first and second communication modes being used successively and alternately, and

a changeover from the first to the second communication mode being implemented according to at least one signaling information transmitted by the transmission device to the receiving terminal through the first communication mode.

13. (Currently Amended) Transmission device designed to be implemented in a communication network comprising at least one terminal adapted to receiving data from ~~the~~ said transmission device, wherein the transmission device comprises:

- means of setting up a communication between ~~the~~ said transmission device and a first of ~~the~~ said terminals, called the receiving terminal, using a first communication mode based on a single carrier modulation; and
- means of changing over to a second communication mode using a multiple carrier modulation, a communication channel using ~~the~~ said multiple carrier modulation being solely assigned to a downlink for the communication between ~~the~~ said transmission device and ~~the~~ said receiving terminal;

~~the~~ said first and second communication modes being used successively and alternately,

the means of changing over from the first communication mode to the second communication mode being implemented according to at least one signaling information transmitted by the transmission device to the receiving terminal through the first communication mode.

14. (Currently Amended) Receiving terminal that designed to be implemented in a communication network comprising at least one transmission device, ~~the~~ said terminal being adapted to receiving data from ~~the~~ said at least one transmission device, wherein the terminal comprises:

- means of setting up a communication between a first of ~~the~~ said transmission devices, called the transmission device, and ~~the~~ said terminal using a first communication mode based on a single carrier modulation; and
- means of changing to a second communication mode using a multiple carrier modulation, a communication channel using ~~the~~ said multiple carrier modulation being solely assigned to a downlink for the communication between ~~the~~ said transmission device and ~~the~~ said receiving terminal;

~~the~~ said first and second communication modes being used successively and alternately,

the means of changing over from the first to the second communication mode being activated according to at least one signaling information transmitted by the transmission device to the receiving terminal through the first communication mode.